Understanding Anxiety in Children with Autism Spectrum Disorder

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Learning Objectives

• Participants will increase their knowledge of...
  – what constitutes ‘anxiety.’
  – why children and youth with ASD are at greater risk for developing anxiety.
  – the types of anxiety disorders seen in children and youth with ASD.
  – considerations for assessing and treating anxiety disorders in children and youth with ASD.

What is Anxiety?

• Clinical term used to describe....
  – Worry
    • Thoughts of uneasiness or concern that something bad may happen (perceived threat).
  – Fear
    • Negative emotion induced by worry/perceived threat.
  – Anxiety
    • Physiological & psychological state with 3 components: cognitive (worry), emotional (fear), and behavioral (avoidance, meltdowns, other behavior problems).
    • If anxiety symptoms cause functional impairment then it might be diagnosed as an ‘Anxiety Disorder.’
What is Anxiety?

This figure shows the 3 components of Anxiety.

Behavioral: Avoid, meltdown

Emotional: Fear

Cognitive: Worry

Why Talk About Anxiety in ASD?

- High percentage of children with ASD have co-occurring anxiety.
- Anxiety can cause problems in school, home and community.
- Anxiety can affect the child's overall well-being and that of the family.

Why Do Children With ASD Have Higher Rates of Anxiety Than Other Children?

- Clinical researchers suggest that ASD impairments increase the risk for developing one or more emotional-behavioral disorders (EBD).
  - Anxiety disorders are common.
- Diagnosis of ASD now requires the clinician to specify if the individual also has a specific EBD, such as an anxiety disorder.
ASD & Anxiety
• Social Communication & Interaction Impairments.
  – Difficulty with social-emotional concepts in self and others.
  – Difficulty identifying and understanding social cues.
  – Limited insight into thoughts, feelings, and motivation for action (self & others).
  – Limited learning from social environment on how to cope and problem-solve.

ASD & Anxiety
• Restricted & Repetitive Behavior, Interests, and Activities.
  – Insistence on sameness (rigidity) may interfere with effective problem-solving & coping.
  – Repetitive, non-functional behavior may interfere with developing & using alternative behaviors to help with anxiety management and coping.
  – Repetitive behaviors may be used as a means of coping with anxiety, but these behaviors can interfere with overall functioning.

ASD & Anxiety
• Clinical researchers suggest that related conditions may also play a role.
  – Language Impairment.
    • Limited vocabulary to label triggers to anxiety & to label, understand & express emotion(s), behaviors, & consequences of behavior.
    • May interfere with learning/developing coping and problem-solving skills.
  – Intellectual Level.
    • Some studies indicate that IQ level may increase risk for developing an anxiety disorder.
ASD & Anxiety

• Clinical researchers also suggest that developmental factors may contribute.
  – Children with ASD may experience different anxiety disorders at different ages. For example, some studies indicate….
    • Younger children: more likely to have Specific Phobia.
    • Adolescents: more likely to have Generalized Anxiety Disorder, OCD and Social Phobia.
  – Anxiety may not look the same as in typically developing children at the same age.

ASD & Anxiety

• Clinical research indicates that anxiety symptoms wax and wane.
  – Environmental factors likely play a role.
    • Stressors increase anxiety symptoms, particularly if the child doesn’t have adequate coping skills.
      – May lead to development of an anxiety disorder.
  – Makes identifying anxiety disorders that much harder unless routinely monitoring and screening for anxiety over time.

Anxiety Disorders in ASD
Anxiety Disorders

• Commonly diagnosed anxiety disorders in ASD.
  – Generalized Anxiety Disorder (GAD).
  – Social Anxiety Disorder.
  – Obsessive-Compulsive Disorder (OCD).
  – Specific Phobia
  – Separation Anxiety Disorder
  – Panic Disorder

Anxiety Disorders

• Generalized Anxiety Disorder (GAD).
  – Chronic and persistent worry about a variety of life events/issues more days than not for at least 6 mos.
  – Many non-specific physical (somatic)/emotional symptoms.
• Social Anxiety Disorder.
  – Marked and persistent fear of social or performance situations.
  – Fear of acting in a way that will be humiliating or embarrassing.
  – Associated with negative self-evaluation.

Anxiety Disorders

• Obsessive-Compulsive Disorder.
  – Obsessions:
    • Recurrent intrusive thoughts, images or impulses.
  – Compulsions:
    • Repetitive behaviors or mental acts, performed to reduce anxiety/neutralize obsessive thoughts.
Anxiety Disorders

• Obsessive-Compulsive Disorder.
  – Obsessions/Compulsions tend to fall into a few categories:
    • Contamination obsessions with cleaning compulsions.
    • Responsibility for harm obsessions with checking compulsions.
    • Order/symmetry obsessions with arranging compulsions.
    • Repugnant thoughts with mental rituals/neutralizing strategies.

Anxiety Disorders

• Specific Phobia.
  – Marked and persistent fear of a specific stimulus.
  – Attempts are made to avoid the feared stimuli.
  – Encounters with the feared stimuli may result in severe anxiety reaction, possibly a panic attack.
  – Children with ASD may differ with respect to source of fear compared to general population.

• Separation Anxiety Disorder.
  – Developmentally inappropriate fear of loss or separation from caregiver or home.
  – Repeated nightmares of separation.
  – Physical complaints when separated or in anticipation of separation.

Anxiety Disorders

• Panic Disorder.
  – Discrete period of intense fear or discomfort, with several of the following:
    • Racing heart, palpitations, pounding.
    • Sweating
    • Trembling or shaking
    • Shortness of breath
    • Feeling of choking
    • Chest pain or discomfort
    • Numbness or tingling
    • Chills or hot flushes
    • Dizzy, lightheaded, or faint
    • Sense of unreality or detachment
    • Fear of losing control, going crazy, or dying
  – With or without Agoraphobia (anxiety about being in a specific place or situation that you believe you can’t escape from).
ASD & Anxiety

• Because of the high risk for anxiety and the potential for negative effect on functioning and well-being, regular assessment is needed to ensure that effective treatment is provided in a timely manner.

Assessing Anxiety in ASD

• Assessment helps determine ....
  – If the child has one or more anxiety disorders or just periodic anxiety symptoms in response to situational stressors.
  – If the anxiety symptoms/disorder is affecting the child’s functioning and/or well-being.
• Children with ASD may not be able to report on their own feelings and personal experiences.
  – May not have the vocabulary.
  – May not understand their thoughts and feelings.
  – May not understand the concept of ‘anxiety.’
Assessing Anxiety in ASD

• Therefore, parents/caregivers and school professionals need to collaborate to **monitor** the child for......
  - Changes from typical **baseline** level of functioning.
  - For evidence of **personal** distress.
  - For a **pattern of behavior** that is outside the norm for the child.

Assessing Anxiety in ASD

• Particularly important to monitor for changes in baseline functioning under these following conditions....
  - Before/during/after major transition periods, for example...
    - change in school or home.
    - transition from elementary to middle, and high school to work/college.
  - When significant change occurs at home or school.
    - Teacher out on leave; parent travel for business; death of a caregiver; birth of a sibling; loss of a friend....
  - Throughout adolescence and young adulthood.
  - After any change in the child’s health.

Assessment Model

• If changes are observed, need to screen specifically for anxiety.
  - Methods: observation, interview, rating scales.
• If the screen is negative → continue to monitor.
• If the screen is positive → diagnostic assessment.
Methods of Assessment

- Multiple methods and multiple informants are often needed to gather data on the following...
  - Baseline and current functioning.
  - Anxiety symptoms.
  - ASD symptom profile.
  - Developmental levels.
  - Medical status and medications.
  - Environment/context.
  - Changes in circumstance.

Methods of Assessment

- Methods of assessment include....
  - Record Review.
    - To obtain history on developmental, emotional-behavioral difficulties and treatment, and medical issues.
  - Interview.
    - Of the parent/caregiver, teacher (where applicable), and child (where applicable).
  - Questionnaires/Rating Scales.
    - That measure for anxiety disorder (and other disorders, such as behavior disorders).
    - That measure specific symptoms associated with anxiety.
Methods of Assessment

• Methods of assessment include...
  — Direct observation.
    • Of the child (where applicable) to evaluate mood, thinking, appearance, activity level, etc.
    • Good for routine monitoring!!!
  — Functional Behavioral Assessment (FBA).
    • Specific type of assessment that evaluates environmental and other factors that may be related to the child’s anxiety.
    • Particularly useful for those youth who may also have behavior problems (e.g., meltdowns) that may be related to anxiety symptoms.

Assessment Measures

Some select measures

Assessment Measures

• There are a number of assessment measures that can be used for screening, diagnostic and progress monitoring purposes.
  — Not a lot of research on these measures, but some is emerging.
  — Evaluator needs to be familiar with the measure to make sure it is appropriate for the purpose of the evaluation.
    • Screening vs. diagnostic vs. progress monitoring.
Assessment Measures

• Direct Observation.
  – Good for observing what factors may trigger and maintain the anxious behavior.
  • Antecedent-Behavior-Consequence (ABC) form.
    – Used often in a Functional Behavioral Assessment.
    – Recommended for use in monitoring and progress assessment.
  • Scatter Plot.
    – Often used to identify a relationship between an environmental condition and a behavior that may seem random, but is consistently displayed.

Assessment Measures

• Rating Scales.
  – Good for screening, diagnostic and progress monitoring assessments.
  • Child Behavior Checklist 1.5-5 & 6-18* (Achenbach & Rescorla, 2000, 2001).
  • Behavioral Assessment System for Children-II (Reynolds & Kamphaus, 2004).
  • Aberrant Behavior Checklist (Aman & Singh, 1985)*.

*Sufficient research to support its use in ASD assessment.

Assessment Measures

• Interview.
  – Good for screening, diagnostic and progress monitoring assessments.
  • Functional Assessment Interview (FAI; O’Neill et al., 1997).
  • Kaufman Schedule for Affective Disorders and Schizophrenia (K-SADS; Kaufman et al., 1996).
  – Both interviews are appropriate for use in ASD assessment.
Linking Assessment to Treatment Planning

• Data from the diagnostic assessment informs the Treatment Plan.
  – Data inform the interventions needed to address **ASD symptoms** that are related to the anxiety.
  – Data inform the interventions needed to address the **anxiety disorder/symptoms**.
  – Data provide a baseline for monitoring response to the Treatment Plan.
Treatment Targets

Different treatment approaches may be used to address ASD and related impairments and one or more components of anxiety.

Behavioral

Emotional

Cognitive

Treatment Targets

- The Treatment Plan will often need to be comprehensive, using different methods to address...
  - ASD impairments related to the anxiety disorder/problem.
    - Functional communication, language, social, and behavior regulation.
  - Behavior disorder/problem that may also be present.
    - Meltdowns,
    - Aggression & Self-injury
    - Noncompliance
  - Anxiety disorder and symptoms.

Treatment Methods

- A number of evidence-based methods exist.
  - ASD, Related Impairments, Behavior Disorders.
    - Applied Behavior Analysis
    - Behavior Modification
  - Anxiety Disorder and Symptoms.
    - Behavior Therapy.
    - Cognitive Behavior Therapy.
    - Psychopharmacology (medication).
    - Combination Interventions.
Treatment Methods

• Methods of Applied Behavior Analysis & Behavioral Modification often used to address ASD impairments and Behavior Disorders.
  — Language skills training.
  — Functional communication training.
  — Social Skills training (e.g., Skillstreaming Series).
  — Behavioral self-regulation of repetitive behaviors.

Treatment Methods

• Some examples of behavior analytic methods include....
  — Direct Instruction
  — Discrete Trial Teaching
  — Verbal Behavior Training
  — Incidental Teaching
  — Model-prompt
  — Coaching

Treatment Methods

• Behavior Therapy (BT) Approaches for Anxiety and Behavior Disorders.
  — Relaxation training.
  — Exposure methods.
  — Systematic desensitization methods.
  — Reinforcement systems.
  — Assertiveness training.
  — Problem-solving training.
Treatment Methods

- Cognitive-Behavior Therapy (CBT) Approaches for Anxiety.
  - Self-instructional Training.
  - Coping Skills Therapy.
    - Anxiety Management Training.
  - Problem-solving Therapy.
    - Structured approach with script.
  - Self-Management Therapy.
    - Self-control training.
    - Self-regulation training.

Psychopharmacology

- Corrects the biochemical abnormalities thought to be responsible for the anxiety & any associated behavior problems.
- Few evidence-base medications: Risperdal & Abilify address agitation, aggression, and meltdowns that may be associated with an anxiety disorder or problem.

Combination Methods

- Applied Behavior Analysis/Behavior Modification for ASD impairments & behavior disorders.
- BT & CBT to address anxiety management, and any skill deficits in emotional and behavioral regulation.
- Medication to adjust abnormalities hypothesized to contribute to the child’s anxiety.

Treatment Methods

- Parent/caregiver/staff training includes...
  - education on ASD impairments and the anxiety disorder and its symptoms.
  - education and training on the intervention methods used to improve ASD impairments related to the anxiety disorder.
  - education and training on the intervention methods used to treat the anxiety disorder.
  - assistance to establish support systems to support continuity of care across home, school, and community.
Treatment Objectives

Cognitive
- Teach how to label triggers to anxiety, emotions, and anxious behaviors and their outcomes.
- Teach coping self-statements and problem-solving skills.

Emotional
- Teach the child to identify, label, and express his/her emotion(s).
- Teach the connection between trigger and anxious feeling.

Behavioral
- Teach how to identify behavioral response (internal arousal/external expression) to anxiety, trigger, & outcome.
- Teach skills to replace problem behaviors associated with anxiety.

Treatment Considerations

- Behavior Therapy and Cognitive Behavior Therapy methods may need to be adapted to the child’s instructional level.
  - Identify ASD needs to improve participation in BT/CBT and provide intervention to address these needs.
  - Conduct shorter sessions, more frequently.
  - Provide more opportunity to practice anxiety management skills and strategies.
  - Parent and staff education to assist with transferring skills to the natural setting (e.g., home, school, community) for repeated practice.
Treatment Considerations

• Use of social-cognitive supports and visual supports.
  – Social stories, coping cards, problem-solving cards.
  – Visual cues for specific skills/strategies, rule cards, prosocial skill cards etc.
• Provide training for language and functional communication impairments related to anxiety.
  – Vocabulary and language structure for identifying and expressing:
    • Triggers to anxiety.
    • Emotions and body sensations.
    • Coping statements and cognitive rules.
    • Behavior and outcomes.

Treatment Considerations

• Use child specific interests to teach relevant concepts.
  – Use of specific language to label things.
  – Use of interests to frame the teaching of specific skills.
• Use of reinforcement system(s) to increase motivation and learning.
  – Therapy session.
  – Home and school setting.

Treatment Considerations

• To evaluate the child’s response to intervention, a formalized progress monitoring system should be established and revisions made to the Treatment Plan based on performance data.
Case Example

• Case Description:
  – 10 years old female.
  – ASD without intellectual disability or language impairment.
  – History of severe tantrums and meltdowns, and physical aggression.
  – Lives at home with parents and younger brother.
  – Fully mainstreamed.

Case Example

• Assessment Protocol (by community psychologist).
  – CBCL, K-SADS, & FAI.
  – Clinical interview with parents.
  – Direct observation of child in session.
  – Parent completed A-B-C sheets for 2 weeks.

• Diagnosis.
  – Generalized Anxiety Disorder.
  – Aggressive behavior related to Anxiety Disorder and ASD impairments in social communication and behavioral regulation.

Case Example

• Combination Approach:
  – Cognitive-Behavior Therapy and parent education from community psychologist for anxiety disorder (also included the development of a Behavior Support Plan for home).
  – Community psychiatrist for medication management of anxiety symptoms (e.g., agitation) and aggression.
  – Residential Habilitation services from local developmental agency to implement Behavior Support Plan at home.
  – Expanded school-based supports and interventions to address social communication impairments.
Case Example

• Progress Monitoring:
  – Child and parent report on anxiety symptoms and behavior problems.
  – A-B-C for behavior problems at home.
  – CBCL at 6 months.
• Care Coordination:
  – Community Psychologist.
  – Parent.
  – Medicaid Service Coordinator.

Select Resources

• Books

Select Resources

• Books
  – McGinnis & Goldstein-Skillstreaming series available through Research Press at https://www.researchpress.com/
Select Resources

- Rating Scales & Interview:
  - K-SADS: [http://www.wpic.pitt.edu/ksads/default.htm](http://www.wpic.pitt.edu/ksads/default.htm)

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